## Tower Standard Technical Group Discussion Notes from September 22, 2016 Call

Attendees: Bob Egan, EPA Kristen Hanson, LDF TNR

Dave Larsen, REI Chris Saari, WDNR

MIP/HPT webinar from Cascade – REI is waiting to hear from everyone on the specifics of what we would like to see covered in the presentation. Egan said he was trying to arrange a webinar by S2C2 to provide their interpretation, including the recent LIF work. This is tentatively scheduled for the afternoon of Thursday, September 29. Larsen said he would check with Cascade about possibly scheduling their presentation for the morning of September 29. Hanson said she needs the data output files from Cascade (Larsen provided instructions on how to access the files in an email message after the call).

Additional monitoring well installation update – Egan said the additional wells were installed and sampled in early August. The screen of the deep well adjacent to Haskell Lake was set about 5 feet above bedrock. The groundwater sample from the mid-depth well installed near the source area was highly contaminated, while the sample from the deep well indicated impacts at depth. Bristol is currently working on a Tech Memo. Egan also said that he should have Bristol's draft RAOR by September 30.

USGS surface water/groundwater study – Hanson reported that the temperature sensors were in place at the same time that the additional monitoring wells were installed. Data showed temperature differentials in the lake, which points to target areas for future sampling. Porewater samples were collected near the dock, to the east, and from a background location. Shallow sampling was successful, but it was harder to get samples at depth due to a rocky substrate. USGS will report out temperature gradients to LDF by the end of September. Additional investigation will then be planned and completed, with a more formal research report coming in the future. Egan asked if USGS could advise EPA on sampling locations through the ice; Hanson said they would work on that.

Recent LIF investigation – Hanson said Matrix performed the LIF work on September 7 and 8. Hanson said the LNAPL was more widespread than anticipated. The LNAPL was shallow (surface to 15 feet). Hanson said the LIF results correspond to what was seen with the MIP/HPT. She added that it appears that the LNAPL pinches out before the area where the plume starts to dive. In reply to Larsen's question, Hanson said that the LIF data could be shared with Cascade. Larsen said he would get the information to Cascade to incorporate into their data presentation.

Initial remedial planning steps – Egan said that after Bristol sends the draft RAOR, he will share it with this group for comment. EPA will also consult with LDF, look at potential monetary contributions, and see how much money remains under EPA's task order. Egan thought this group should try to talk again within a couple weeks. He will ask us to check our schedules

when he shares the draft report.

Schedule revisions – Egan was wondering if we could review the available information and install the additional monitoring well needed to complete the network yet this fall? Larsen thought it would be doable, and he thought we should shoot for finishing the work by the end of October. Larsen pointed out that the next quarterly sampling event would be due in the same time frame. Saari said he thought he could provide suggestions for well locations and depths soon after seeing the Cascade/S2C2 presentations. Saari also said he would work to see that, from a PECFA perspective, the work could proceed this fall.

Larsen asked if we could/should include the project manager from Bristol in future discussions. Egan said yes, EPA's contract with Bristol includes time for conference calls.

Next Call: 8 AM, October 27, 2016